(A mix of the Prosodic Description at the Beginning,
and pieces of Interview to be Noodled Thither.)

The Real HyperMan

Ted Nelson's Parallel Universe

This is what's left of OMP, without Playlet, prior to **Full Noodle Merge.**

Omni Piece--

TED NELSON
INTERVIEWS TED NELSON

INTERVIEW SECTION

where?

I campaigned heavily for sexual liberation in college in the fifties, which nearly got me expelled.

HYPERTEXT AND HYPERMEDIA (coined a couple yrs later)

Omni piece, Part Three.

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Also: Oplus II

Additions to Omni Piece evolving into new piece.

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We knew we should publish an interview with Ted Nelson, but who could do it? Finally *Omni* asked Ted Nelson to interview himself. Sure enough, the result was typical Nelson, meaning not what anyone expected. It took more resources than we imagined, throughout the cosmos, but we think you will enjoy the result.

"This is my nth career crash,"
he says with a wink, "although n is hard to determine." Career crash after career crash, Ted Nelson is The Legend that Won't Go Away, a cult figure.

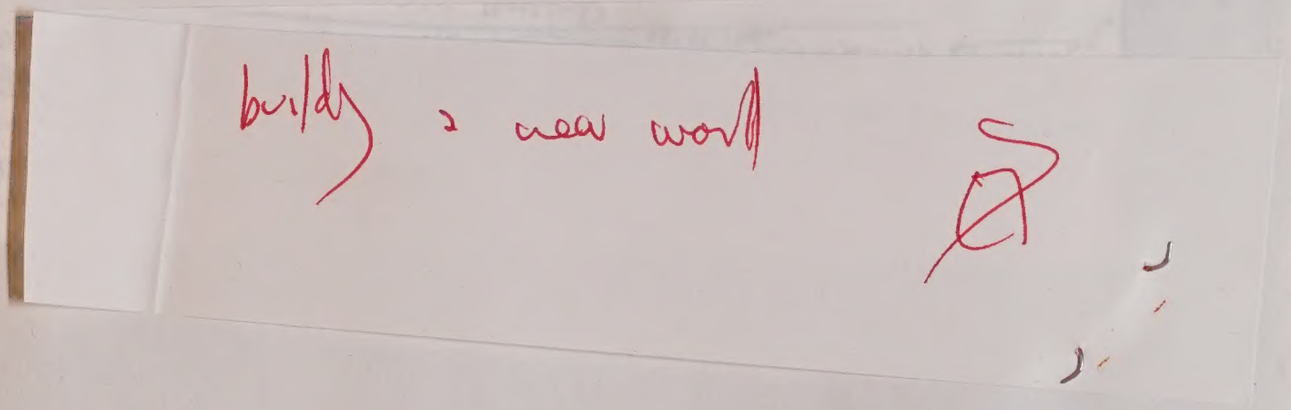
And the wink tells you he'll make it through again. Raffish, roguish, playful and confiding, he communicates playfully at many levels. Not everybody can handle the intensity.

He's pushing sixty, but most people think him younger. The wrinkles and grey are there, but there is a lurch and bounce unusual for someone of distinguished years.

They say all kinds of things about him,
but at least now they usually spell his name right (Theodor Holm Nelson-- named for the shy and playful Norwegian grandfather who raised him, Theodor Holm).

Ted Nelson is very unlike most Americans but as American as you can get.

There is a street that Studs Terkel uses to stand for all America--Division Street, Chicago. That's where Ted lived until he was six, in the neighborhood Chicago calls "the Gold Coast."



Has his own PARALLEL UNIVERSE--

an entire world of software design wholly his own

alternatives to hierarchical files

alternatives to hypertext and multimedia as now popular

PARALLEL STRUCTURES

INTERCOMPARISON

TRANSCLUSION

At war with the world all his life

Ted has recently mellowed,
partly because of a wacky California church he joined (the Human Awareness Institute, with workshops where you can go naked),
partly from a happy home life going on three years with former ~~IBM team leader~~ Marlene Mallicoat,
herself sweet, sparkling and clever.

He has never been concerned with commonplace matters-- sports, making a living, having an ordinary home.

The main issue for him is the continuity of knowledge into the future-- education, the preservation of libraries, freedom of the press, and the next forms of the written word-- which he considers to be transclusive networking metamedia, "the manifest destiny of literature, movies, ideas and art."

Crypto-academic.

Without a Ph.D., he has taught at various colleges and universities, managing to reach the rank of Visiting Professor, teaching in departments of Anthropology, Art, Architecture, Economics, Mathematics, Sociology, Information Science and Instructional Resources Development. Academia is deeply ambivalent about him.

He has actually founded a field (there are now Hypertext and Hypermedia departments and conferences world-wide). He is in the Scottish national high-school curriculum and has managed to reach the rank of Visiting Professor. Yet most universities are afraid to touch him.

[THE INTERVIEW]

Q. You're famous for a word, hypertext, and something that you DIDN'T do, which is called Xanadu.

I'd like to point out that that's "Xanadu" is a trade mark, and I haven't done it YET.

Q. Noted.

Okay, what about hypertext?

Nelson. Hypertext is the new literary form that interactive screens made possible.

N. Well, except that hypertext — to put it at its most basic level — is to unfetter the tyranny of literacy.

Omni. So what does hypertext have to do with computers?

Nelson. We are not entirely clear how to do it fully. We're not part of the computer concept, we're not part of the word processing. Hypertext is not a technical idea, it's a literary idea.

Omni. Literary?

N. Literature is —

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THE UNITY OF IT ALL

Q. How did this all begin?

Curiously, I would say that my entire childhood and youth led up to the idea of Xanadu, inevitably. I would have thought of it whenever the truth about computers, and their possibilities, reached me.

I was a very thoughtful, philosophical child. A defining

When did you get into philosophy?

I must have been four or five years old, since I remember we were rowing in Lincoln Park, in Chicago, and I thought about the changing interconnection of the water particles, and how everything is interconnected and changing, and how difficult that is to capture and understand.

moment I remember was in Chicago, when I was four or five. My grandfather was rowing, my grandmother sat in the front with her veil and high heels (as always), and I trailed my hand in the water. As the water passed between my fingers I thought about the myriad particles in the water, how they were reshaping themselves around my hand,

Q. When you were five?

Yeah, in a park in Chicago. The complexity and continuity of that changing shape, that flowing glove of water and how difficult it was to express, in words or in pictures, what was the same and what was different between the successive instants of that rolling swirling manifold; and how all the world and the universe was like that, just a larger rolling swirling manifold, and how hard it all was to understand and express, except that similarity and continuity were what all understanding was about.

Q. How can you remember thinking all that?

Because it was the defining moment for all my ideas, and that same subject has swirled and rolled through my head

ever since: similarity and difference, connection and connectivity, and how to recognize and express them.

Q. But that's all of philosophy, science and literature!

I just think of it as one subject. My subject. When I was twelve I heard about Buckminster Fuller, and that he called himself a Generalist. I thought: At last, of course! I won't have to narrow down after all.

Everything is conected and all principles interpenetrate. Every object is subject to innumerable principles and connections. This is how I have seen the world since I was five.

And that's what literature is about: all the different connections and ways of stating them.

This then became my work in college, and my continuing work in philosophy, which I call General Schematics-- the problems of isolating, modelling and explaining things, given the interconnectedness of it all. And it became my ideas of hypertext, Xanadu, and network publishing.

WHAT GOT YOU STARTED?

Omni:
What prepared you for this vision?

Nelson:
Well, I was clever. I was also very bitter and alienated from an early age. I always hated school. Ostensibly the purpose of school is to teach, yet it embittered me. But it let me to trust my own mind rather than my authority.

Why did you see things that way?

Nelson:
I was original, embittered, clear-minded and idealistic.

Were you trained in computers? Were you a mathematician or engineer?
Not at all. I was bitterly sad when I realized I couldn't pass calculus, and so the sciences were closed to me. But I was clear-minded and imaginative, and I could leap immediately to conclusions that would take others years, and I could visualize things they could not. This has been both an advantage and a curse, because I saw at once what had to be, but I couldn't make others see it with words.

CHILDHOOD

So you were not an ordinary kid?

Definitely not. My parents were actors, clever and combative, and they separated before I was born. I was raised by my mother's parents in New York city, so I grew up a combination of very philosophical and very sophisticated. We went to the theater and foreign movies a lot, and there was a lot of theater talk, particularly when one of my parents would visit.

At the dinner table we talked about literature, history and science. We had an encyclopedia and subscribed to things, and I read all the popular controversies of the forties. All matters of intellect fascinated me, and I didn't associate intellect with school at all. That was very lucky, since I hated school so much.

Have you always been an outsider?

Since earliest childhood. I played cops and robbers, but I was interested in words and ideas. By seventh grade I really hated sports. To avoid sports I played hookey hanging out in bookstores and going to foreign movies.

Who were your heroes in childhood?

My grandmother, who raised me, especially called my attention to Leonardo da Vinci, Shakespeare, Frank Lloyd Wright, Oscar Wilde, George Bernard Shaw. Good bunch.

But in the meantime I had become especially fascinated by Buckminster Fuller, Bertrand Russell, Orson Welles and Walt Disney. They were my heroes when I was twelve. My career has followed Orson's all too well: starting at the top, and struggling along to do things on my own ever since.

#16

What was the main experience in your life?

When I walked out of seventh grade, I hated my teacher, and he sent me from the room one time too many. On the way home that day, I decided four things: most people are fools; God does not exist; most authority is malignant; and everything is wrong. Those have been my guiding beliefs ever since, and carry over quite nicely into the computer field.

Q. Your eccentric life, trying to do everything differently, began at that time?

My paradigm: EVERYTHING IS WRONG.
For years it was my unspoken assumption that anything would be better if it were done DIFFERENTLY. Stated openly, this is obviously false, but it has been my unexamined life assumption.

I thought everything should be done differently. My assumption was that if it was done differently, it would be better. For instance, I tried to persuade my grandfather to buy a Tucker Torpedo, the car with the headlight in the middle that was supposed to go a hundred miles an hour.

I thought the world would be a much better place when signs could be printed in day-glow and we could be literated from restrictions of language and use the so-called "dirty words" freely. So I'm very disappointed to find that now that we have those things, day-glow everywhere and no restriction on words, nothing is really different after all. Fuck.

My most fundamental belief has been that everything is wrong and should be completely different, so I have searched for every possible way to change the way life is lived. But to try to be different for its own sake is just as wrong as trying to be just like other people.

I've tried out a lot of lifestyles, work styles, sleep styles. I've tried staying up twenty-four hours at a time and sleeping twelve. I've tried very unusual desks and filing systems.

Q. What prompted all that?

The sense that everything was wrong. Science fiction and the great realms of possibility.

Then it was all galvanized by a movie I saw ~~in high school~~ called "Breaking the Sound Barrier." In it the heroic young British plane designer goes up himself in his plane, and gets into the same fix as pilots who crashed the same model. But he decides to break the rules and push the stick FORWARD. He pulls out of the dive and wins the day. I resolved to be the guy who would not be afraid to push the stick forward.

(It turns out that Chuck Yeager, the American who REALLY broke the sound barrier, said after he saw the movie: "If I'd pushed the stick forward, I'd be dead.")

Considering the different living experiments I've tried, it's a wonder I'm not dead.

Manuscript Mangement in High School

Q. Was that the most important issue for you in high school?

No. It was the problem of manuscript management. I learned to rewrite in high school, but the problem of organizing the material seemed to me a technical one, not a matter of "discipline" or "experience," but of finding some new filing and presentational method.

I was always designing systems for writing. I saw the problem as not just a matter of words and will-power, but as having good tools.

I experimented with needlesort cards in 1950, when I was thirteen. What I was looking for, of course, was a machine that could keep track of all the pieces you wanted to organize. But it had the misnomer of "computer," and no one suspected at that time that we would use computers for text.

So what happened in college?

Q. So what was college like for you?

College was wonderful, but I didn't realize it at first. College wasn't like "school," it was more like swordfights in a bookstore. (I went to Swarthmore, which is a great place for friendly argument and long words.) I loved the controversy and all the perpetual theoretical uncertainties, branching in every direction, all the alternatives and complexities and the wonderful words of each Universe of Discourse. I switched majors every month, scouting the issues at the leading edges of academia.

Q. Didn't you have to pick a major in college, and narrow down?

Not in my heart. They told us in freshman week to be seekers after truth, but nobody else took it seriously. I sure did; I really WAS a Seeker After Truth. Officially I was a philosophy major, but that took in everything.

Q. So how would you summarize your education? Was it just about sophistication?

No. What I really learned in college was that I had certain powers of understanding, initiative and vision. I had my own little magazine and newspaper, I made a movie and I wrote a rock musical (the first, in 1957). And I found my way to the hot spots of academia.

I was torn between academia and show business. But I knew I would be at the leading edge, because I would FIND the leading edge. I believed when I graduated from college that I would make some fundamental contribution to a field that had not yet been invented. Which has and has not happened in the damndest ways.

GRADUATE SCHOOL

I went straight on to graduate school, but it turned out to be a horrible experience, entirely unlike college. You're supposed to shut up and narrow down. I could never do either.

Q. Where did you go?

The University of Chicago and Harvard, both very sophisticated places, but none that allowed the swashbuckling intellectual freedom of Swarthmore.

Everything came together: movies, literature, architecture, intellect and all my heroes.

Viewers,
media,
lies — lying media, lying governments, lying organizations,
freedom, fools,
~~dying governments~~,
manuscript management,
fools,
malignant software,
wrongness of event,
~~SAME~~ & DIFF (transclusion)
apocalyptic change,
Joe Gould
~~movies~~,
Tesla,
books,
magazines,
cultural icons

Let underlying
every
say book to the rainbow
like I in the

Then, in 1960, at twenty-two, I took the aforementioned computer course. I was used to being bright, right, and in the minority, so I paid only brief attention to what other people said computers were for, and saw at once what they would do for the things I cared about-- literature and movies.

Omni:

So you saw the computer differently from everyone else.

Nelson:

I saw that the world would read, write and make movies at computer screens. Was I wrong?

Omni:

Clearly not. So what did you do?

Q. And then the big thing happened. Tell me about it.

THE 1960 VISION

Omni:

You spoke of a Big Insight. Could you describe it?

Nelson:

In the fall of 1960 I took a computer course and figured it all out: hypermedia, the future of literature, the network delivery system we would need, how to preserve freedom in the electronic future. And since then it's been a long, unpleasant fight.

Omni:

Let's go through that slowly.

Nelson:

Okay. First of all, the computer screen makes sequential writing obsolete. Our new, generalized writing, which can branch in any direction, is *hypertext*. Add sound and graphics and you get *hypermedia*.

Omni:

Of course.

Nelson:

So how will we dish that up? Obviously, through a network of server machines distributed around the planet.

Omni:

Of course.

Nelson:

That is the future of literature.

The new home of humanity, the site of all work

So I had a unifying vision. We would have a world of interactive software on our computer screens at home and at work. The computer screen would be the new mental home of humanity, the site of all work.

I took a computer course.

Ted's Vision

The1960 Vision

I had a vision in the fall of 1960, a working vision that unfolded during my first months at Harvard, where I foresaw a world of personal computers. All work would take place at screens, interactive software would be the new working environment for every field, interactive text would be the new literature (subsuming the old), and interactive movies would be the new general art medium , subsuming and unifying movies and recordings (what I later called "hypermedia," but the others call "interactive multimedia.")

I dreamt of making people free, of simplifying people's lives by computer. That's what I called computer liberation. I have yet to meet anybody whose life has been simplified by a computer.

And there would be a new literature and a new art of explorable text and interactive media. This would be the manifest destiny of literature, art, knowledge and civilization.

Q. And what about electronic publishing?

That was the main thing. We would have network publishing across the world, uncentralized, populist, with a new freedom of expression, freedom from conventional restrictions. Perhaps the biggest point: ANY NEW DOCUMENT COULD QUOTE FREELY FROM ANY OTHER. That's because it would just have a pointer to the original, and the reader would buy that part from its original publisher.

But it would still have copyright (to reward artists and writers-- with automatic royalty even on the smallest pieces) and allow anybody to quote anything else without permission (since that part would be bought directly from the original publication).

It would be a free-enterprise publishing network where anyone could publish.

It would be a software system and a business system, running on a world-wide network that I figured would somehow come about. Finally, it would be franchised like McDonald's.

But designing this network would be tricky. And it would be franchised, like McDonald's. I chose McDonald's because they delivered a good and product on a predictable basis. They were much smaller then.

And it was my job to design it, this new

literature, this new form of interaction, these new forms of document, this network of human synth.

And I believed I had to build the system that would serve it up to the world, because if I didn't IBM would, and that could mean the end of civilization.

But designing network would be tricky.

It was a good idea. And it still is.

All this time I had been in conflict between two ambitions, two ways of seeing: intellect and movies, academia and show business, theory and theater, representation and presentation. But then, in the fall of 1960, these suddenly came together to give me a stereo vision that no one else had at that time.

Omni:

Also I had two ways of seeing at that time, two conflicting ambitions.

Nelson:

On the one hand I wanted to go into show business; I had already written and produced the first rock musical, at Swarthmore College. On the other hand, I was a very abstract sort of intellectual, and everything I saw I would generalize about in ways nobody else could understand.

These two points of view, show business and abstraction, meant that when I encountered the computer I saw it in stereo as others had not. On the one hand I saw that the computer was really a show-business machine, destined to be your personal reading box and movie system. On the other hand, I saw that the computer did not really deal with numbers; it was the most general possible machine and dealt with *abstractions of any kind*; numbers were just the first ones they'd set it up for.

So creating the right kind of abstractions-- data structures-- for electronic literature became my great mission. And, as I said, nobody gets it even now.

THE VISION

Then what prepared you?

Well, my background was in abstract philosophy and film-making. I knew I had something to contribute academically, but my real talent was film-making. It was a big conflict in my life between these two modes of seeing.

Then I saw what computers were, and these two ways of seeing fused as stereo. First, what computers dealt with were ARBITRARY ABSTRACTIONS, not just numbers, and so the question was which abstractions were most appropriate. And second, you could hook up a screen, and so it was a MEDIA MACHINE, the generalization of both literaature and movies. And so all my preparation had been exactly right.

So what did you do?

Nelson:

So I set about to build the computer systems I would need for my academic writing and my movie-making. I figured it

Unfortunately I underestimated how long it would take. I mistook a clear view for a short distance.

When did you come up with the idea of hypertext?

In the fall of 1960, a few weeks into my computer course, when I suddenly understood what computers were, that they could deal with text and pictures!

As soon as I could see that computer screens allowed interaction. This meant we would NO LONGER BE STUCK WITH SEQUENTIAL WRITING, which I had always seen as an unnecessary encumbrance, a pernicious imposition. Nonsequential structures could be much better, and allow free user exploration.

They could have screens you could interact with, and that meant writing, and all media, would change completely! The future of the human race was at the computer screen! And everything I had imagined in a decent manuscript system could come true, but in multiple dimensions! So I had to build this before IBM caught on, because IBM ruled the computer world in those days, and they were in those days so pompous, authoritarian and shallow. If IBM tried to build tomorrow's system of literature, that would mean the end of civilization.

To me, freedom is what it's all about.

Q. So you foresaw what is becoming our world today--personal computers and the digital convergence.

So it's all come true?

NO! Instead we have a nightmare world.

Nominally, yes, but my vision was for a world made better, clarified and tied together.

It was a DIFFERENT vision. What we have now is a nightmare parody. I envisioned a world that would be convenient for ordinary people,

where individuals could use and enjoy the powers of computers without all this crap they

Instead computerdom is in an appalling state, a nightmare of complexity. People are chained to their machines, having to fight bugs and crashes and enslaved to constant updates of software and drivers, all to run programs which are appallingly stupid and complex.

Detests the current state of the computer field

Compexities to memorize

software artificially made large and complex

preposterous stuff of the Technoids

~~complexities of backup, ease of losing files,~~ inanity of software

Q. Was your vision just about software being easier?
It was about being deeper. We need deep, interactive visualizations of everything. The low mentality of our software is symbolized by the Pie Chart.

Hates the PC
"fascist"
Hates the Macintosh
"artsy-fascist"
detestable "clipboard," better called the Toilet
"To get taken in by the Apple mystique, you have to believe they actually know something."

"Cut" and "paste" were holy words that Apple twisted

a computer world all gone wrong

Omni. But people say your visions
have no logic ——→
A loud ~~that~~ they go / only to put
by understand:

THE VISION

They got part of
Wireless. Cap
HT
HCI
WWW
Int. Media, Int. Movies
BUT NOT THE BIG PICTURE!

So doesn't all that exist now?

So don't we have all that now? How should it be different?

THE STUFF COMES OUT OF MY WORK —

~~What was it you saw exactly?~~

What we can now divide into four movements: personal computing; interactive software; interactive media; and network publishing.

WP
Hed, HT
WWW

A. NOBODY GETS IT! THEY DON'T GET THE MAIN PART! The main part is clarity for the human mind, and that means comparative viewing of things in different contexts!

BUT ~~THEY~~ DON'T GET ~~it~~ of my 1960 stuff is
complex deep s/t
deep interconn
transclusion
Solution + copyright
IT'S ALL OVER!

THE SAME STRUCTURE ~ (TCL)

What everybody does is utterly the same: disconnected windows, no interconnections. W

Here all these twonks are putting fanfares on pie-charts and calling it "multimedia." Where the real issues are the sharing and intercomparison of material.

A key shd to quote & re-use material & see it in different structures & contexts, in the center...

You say your software is different ...

All based on the sideways linkage I've been advocating since 1960.

whereas I've always been designing for windows with lines between their contents, since my first ACM paper in 1968.

THE PARALLEL, SIDE-BY-SIDE VIEWING of stored or retrieved info!

seeing one page side by side, versus what is seen one at a time!

IT'S ALL ABOUT MY PHILOSOPHY OF INTERCONNECTION
IRV

...e creative-writing system I needed, and a world publishing system, Which were the SAME, except on different scales.

The main feature of both was this: being able to use pieces over, and see their original context and their current use.

In the writer's system, this meant being able to see what a thing had been, in other versions which may have been better.

OMITTED

DEC:
RE-USE & INTERCOMPARISON, small & large
the actual in the writer's system:
"Have I used this?"
"Which are its later?"
unrestricted quotation - elegance pay
because purchased for original
& original context
immediately visible

In the publishing system, you wanted to let people re-use materials from other documents

And for the publishing system my inspiration was this: anyone could quote from any document, because it would be taken from that original, with automatic royalty and credit to the original publisher. This meant great freedom of re-use, PLUS the main benefits of copyright.

This could be exactly the same software, you see. In both cases, material was being taken from previous versions and projects, and you'd be able to see them in the old and new contexts. In the latter case we added royalty.

Q. So back to Xanadu. What is Xanadu now, exactly?

Right now it's just a trademark. It's effectively a baptismal font from which I can bless software that embodies the ideal-- and the detailed methods-- that I think are so important.

Why is Xanadu so important to you?

It's my dream, it's my religion; it's my politics. My religion, because I believe most of all in human creativity (which is why I don't care much for artificial intelligence). My politics, because the real politics now are about information: Orwell and Bradbury had it right, finding and preserving the truth-- and that really means multiple points of view--is and always will be the great issue.

The problem is getting at things. And if we can have true network publishing as a populist medium, then we have a chance of alternative views being heard.

XANADU

What is Xanadu exactly? People have a lot of different impressions.

First of all, it's my personal trademark. The name was owned by others for a long time, but I got it back, so Xanadu is anything I say it is.

Xanadu is a whole literary system. Literature is connected documents; literature is what remains after the buildings crumble. Paper literature has two major defects: you can't get at it, and it doesn't explicitly register the connections. Xanadu does both.

Ideally, it's a world of publication where all works will be available.

Practically, it's a business system for selling copyrighted documents, and movies and art and data, by the byte. But as a business system it fulfills an idealistic objective: it clears up the copyright problem.

Clears up the copyright problem?

The copyright hard-liners say, "We don't want our stuff to get out of control!" and the anti-copyright hard-liners say, "We'll steal it all." The solution is a business arrangements where the publishers agree to re-use without permission, and the users agree by contract to re-use only by transclusion pointer-- so that the material is always taken from the original at the time of delivery.

Xanadu allows everybody to quote from everybody else without red tape-- because permission is granted in advance, and each portion is bought from the original publisher, with automatic royalty, at the time of request.

Everything will be available, copyright will be no impediment, and yet there will be reward for creators of popular material-- this is the combination.

I have always seen copyright as the only leg up for creative people; and yet it also gets in the way of legitimate re-use.

Q. Is Xanadu like Word Processing, or a Database, or both?
It's in between. What people don't realize is that "word processing" and "database" are arbitrary constructs-- imaginary paper, imaginary file cards, elaborated as different designers saw fit. But we can design any arbitrary constructs.

Q. What's wrong with "word processing," and why do you put it in sneer quotes?

These are irritating software packages designed by people who have no idea what writing is about, especially item control and management. (Outlining is a very clumsy, hierarchical system for item control.)

I worked on the first visual word processor, and I fought with the rest of the group; I couldn't make them understand the real issues. Word processing only deals with disconnected simulations of paper. What we need is the connections, and the ability to create far grander structures than paper will hold.

Q. Xanadu inspired World Wide Web, the hottest thing on the Internet. How do they relate?

World Wide Web is a wonderful, clever simplification of the Xanadu idea. To me it's not the same idea at all, but the resemblance is clear.

But both of them are systems for anarchic, distributed network publishing-- distributed geographically around the world, didstributed in ownership-- where no one is in charge, and anyone can re-use materials.

And by the way, Tim Berners-Lee, who created the Web, is a great guy.

I've been told there was actually some influence of my work on Mosaic, but I haven't confirmed that with the original developers.

Q. How is World Wide Web different from Xanadu?

Xanadu is built around two concepts, Link and Transclusion, which are different,

A link is a connection (there can be many types). But a transclusion means "bring that in sideways from something else and embed it in here."

Either of these connections can be followed by a reader in both directions-- from the original document and from the document making the connection. In World Wide Web it's only one way.

And royalty, which isn't on the Web yet but various people are going to institute in various ways, is not likely to be pro-rata per byte in others' systems.

As far as royalties are concerned, Xanadu sells the material with pro rata royalty on every byte that's shipped to a customer.

In World Wide Web, link and transclusion are cleverly simplified into one. They're the same thing: you jump to a whole piece, which is connected to your document but not part of it; there's no fine-grained embedment.

You've been working on this for thirty-four years now. What's taken so long?

First of all, it's a very hard problem. Imagine millions of links crisscrossing a huge docuplex of electronic documents, stored on thousands of servers.

In the beginning, there was nothing that could be any kind of software base for this.

Second, I couldn't do it all myself, and that meant working with other people; and very few other people could understand or get behind my ideas.

Whence the name? Is it from Olivia Newton-John?

"Xanadu" was the name of the pleasure palace of the emperor Kublai Khan, near Beijing. The story was brought back by Marco Polo, who had worked for him. Then Samuel Taylor Coleridge, the Romantic Nineteenth-Century poet, read Marco Polo's book and wrote the great poem "Kubla Khan"-- but he forgot part of it.

So I think of Xanadu as the magic place of literary memory, where nothing need be forgotten.

How long have you been designing interactive software?
Since the fall of 1960.

How long have you been designing interactive media?
Since the fall of 1960. It was all part of that one vision.

Q. So you had a pole position for the new world, a decade and a half ahead of Bill Gates. What went wrong?
To begin with, I was deeply alienated from about the age of ten. I was disgusted with conventional people.

Whereas this plan was about an agenda of intellectual freedom and being the Philosopher King. It was a complicated agenda, like trying to build a company where everybody has to be a vegetarian and only wear plaid.

I thought I could do it all myself, without having to explain it, plead it and compromise it to clucks and anti-intellectuals.

47

CHANGE OF VENUE

Everything can be done differently, so little has been tried, people are hidebound by old ideas.

For instance, this interview. You're expected to interview me a certain way, but you could do ANYTHING--

Jeepers, you can do anything! In text, PRODUCTION VALUES ARE FREE!

Remember I said everything is done wrong?

Q. Yeah--

This interview, for instance. Print is low budget, but you can do all kinds of effects; ALL PRODUCTION VALUES ARE POSSIBLE IN PRINT. Yet for some reason I've been asked to do this interview in a dumb conventional format.

Let's try it a different way.

How would you do this interview differently?

Just watch.

Q. But, but--

Stand back.

Omni Piece--

THE PLAYLET

The walls fly apart with great flashes and bangs, and we find ourselves in an enormous room outside space and time.

Faraway walls gleam darkly.

In a circle of chairs sit the interviewees: TED THE LITTLE BOY, TED AT MID-CAREER 1995, and TED THE FEISTY OLD GUY. Facing them are THE GHOST OF ORSON, THE GHOST OF BUCKY, Z31 (someone from the future, in day-glow polyester with racing stripes); and a MYSTERIOUS BLONDE in suggestive clothing.

Illumination is from unseeen spotlights and neon somehow flashing. Pictures by Maxfield Parrish and Walt Kelly fade in and out around the participants, as do scenes from Disney, Eisenstein, Kubrick, Fellini, Kurosawa, Satyajit Ray, Max Fleischer, George Pal.

AN UNCTUOUS WELCOME

Z31. I want to welcome you all here. We have been able to gather you here due to the wealth and generosity of *Omni* magazine, and their access to scientific talent and technologies so far kept secret.

Three Teds (together). This is just right.

Z31. Naturally. We know what you like.

Ghost of Orson. What the hell is this?

Ghost of Bucky. Brobdingnagian synergetics.

Z31. Your presence is greatly appreciated, all of you.

GOO. You have no right to use my apparition. My personality rights are handled by my agency, posthumously.

Z31 (smoothly). But this is satire. More to the point, your greatness, we think you'll be interested in the story.

GOB. If those walls are stone or steel, the energy waste of this setting is preposterous. But that's nothing in comparison to the waste of bringing us here if time travel is involved. The mass kinetics required to warp time on a decade scale are galactic in magnitude. No magazine could pay for that.

Z31. Let me allay your concern. What we have here may best be described as pragmatic illusion. And the time-twisting is more like a twist of lemon. We are using the medium to optimal effect.

TMC95. (Looking around.) Medium? Which medium?

Z31. The print medium.

GOO. So the visuals are phony?

Z31. The reader sees them because supposedly we do.

GOO. So it's FAKE! And we're NOT REALLY HERE!

Z31 (sharply). The good use of budget never was your strong point.

GOB. Ah, the payoff of small forces correctly leveraged.

WHO ARE WE?

GOO (to **GOB**). It's clear, Buckminister, that the fix is in. You and I are outsiders here. These guys even all look alike.

Ted at Mid-Career 1995. Let's get clear about who's who. This little boy is obviously me--

TLB. Is *I*.

TMC95. That clinches it. And I fear that you, charming geezer, am also I--

Ted the Feisty Old Guy. It seems we three are one. I wish I had better glasses.

Ted the Little Boy. So I'm going to become the two of you?

TMC95. And/or, we once were you.

TFOG. Still are.

TLB. So I will grow up to be each of you in turn? Do you both remember this meeting, then, from when you were I?

TN. No, I don't, and it makes me suspicious.

TFOG. Me too. I should remember it twice, once for each of you of me. But I don't.

TLB So this is like the plot of *A Christmas Carol*, where I'm meeting selves from different times of my life. Are you just illusions, then? Or are we all?

GOO. Special effects, I would say. (Sneeringly to Z31.) On a low budget. Just characters on a page.

TMC95. That's what text *is*--

TFOG. Which is in turn just a part of Literature--

TLB. Is this a dream, then? That's the standard ending.

TMC95. And the lowest budget of all.

GOO. Depends what you mean, kid. Life is but a dream.

TLB. That saying always scared me. When I was small, and they sang "Row Row Row Your Boat," I wondered, if life is but a dream, would I wake up, and if this were a dream, who was dreaming it?

TMC95. And whether this is a meeting *or* a dream, we are entitled to know its purpose and scope.

A QUESTION OF IDENTITY

TLB. And who's who.

TMC95. I know who I am. I am myself as of now, 1995.

TMC95. And/or, we once were you.

TPOG. Still are.

TLB. So I will grow up to be each of you in turn? Do you both remember this meeting, then, from when you were I?

TN. No, I don't, and it makes me suspicious.

TPOG. Me too. I should remember it twice, once for each of you of me. But I don't.

TLB. So this is like the plot of A Christmas Carol, where I'm meeting selves from different times of my life. Are you just illusions, then? Or are we all?

CGOO. Special effects, I would say. (Sneezingly to 2321.) On a low budget. Just characters on a page.

TMC95. That's what text is--

TPOG. Which is in turn just a part of Literature--

TLB. Is this a dream, then? That's the standard ending.

TMC95. And the lowest budget of all.

CGOO. Depends what you mean, kid. Life is but a dream.

TLB. That saying always scared me. When I was small, and they sang "Row Row Row Your Boat," I wondered, if life is but a dream, would I wake up, and if this were a dream, who was dreaming it?

TMC95. And whether this is a meeting or a dream, we are entitled to know its purpose and scope.

A QUESTION OF IDENTITY

TLB. And who's who.

TMC95. I know who I am. I am myself as of now, 1995.

TFOG. But I too am myself as of now.

TLB. So am I.

TMC95 (aside). Yeah, but I'm the only one who's getting paid for it.

TFOG. I know who you are, young lad and middle-aged self. But this guy in the funny suit bothers me.

Z31. As to the purpose of this gathering, call it a summit meeting that we will all forget-- consciously.

TFOG. But then who, sir, are you?

TLB. You of the smooth face and smug demeanor?

TMC95. You are alarmingly similar to us.

Z31. I am a clone of convenience, here only to facilitate. Please do not think me smug, for I know we hate smugness.

Three Teds (in unison). Whaddya mean ***"WE"?***

Z31 (proudly). I am, as I said, interviewing us for *Omni* magazine.

Three Teds. Interviewing ***US ???***

Z31. Ahem. I include myself by necessity. Though I have your, that is, our, genes and memories, I do not have the actual past, or present, of each of you. I have your memories but a different attitude. So though I know the answers, I ask to hear them in your respective voices.

GOO. Oh, I get it. This is good. Very funny premise. So you, Zorko31-- if your name tag is correct-- are the stuffy bureaucratic descendant clone of these two gentlemen and the lad they once were.

TMC95. To our mortification.

TFOG. And fascination.

TLB. And curiosity.

Z31. I admit it: I am not one of you. I admit having had it too easy. I just do my job.

Three Teds. ***WHAT???***

TFOG. If you do a job without questioning it--

TMC95. You are not like me--

TLB. Or I--

(All three Teds look at each other.)

Three Teds. AM NOT LIKE US!

SOMEONE ELSE IS HERE

GOO. Gentlemen, we are being ungentlemanly. (Gestures to Blonde.) There is someone else here, someone to whom we owe a certain courtesy--

TMC95. Madam, who are you?

TLB. Yet another of us?

Blonde. Someone else. Someone you always think about.

TMC95. I like your looks.

TFOG. Perhaps we could get together afterwards.

Blonde (drily). How about a threesome?

TLB. I'm always left out! I hate being left out.

Blonde. But I hope you notice that I, too, look like you.

TFOG. I'm not sure how I feel about advances from a female clone, if that's what you are.

Blonde. Hey, it was your idea.

TMC95. Not in that form.

Blonde. Don't be sexist, don't be uptight. What's a chromosome among selves? But I find it amusing that you haven't figured me out yet. I don't just mean in this seance. I mean you think about me always, and you still don't get me. You too, young man.

TLB. I think about you always? But I've never seen you before.

Blonde. You see me everywhere. You just don't recognize my face.

TFOG. Would I recognize, heh heh, other parts of you?

Blonde. Hint: I can be anything.

TNow. Yet you hint at being someone, something in particular.

Blonde. And everything in general.

TMC95. My favorite subject.

Blonde. Your OTHER favorite subject. Hint: I'm always changing, yet I stay fundamentally the same-- like you.

TFOG. Well, I know what you are. You're a tease.

Blonde. Right. And an exhibitionist. I like people to see suggestive parts of me.

TFOG. So you're a slut. I always liked sluts.

Blonde. Not a slut; I give myself to no man.

TMC95 (archly). What do you charge?

Blonde. Everything you've got. Okay. Last hint. You can never have me. No man can. And I am the center of your psyche, Ted Nelson.

WHO SHE IS

TFOG. I get who you are! You are indeed my lifelong obsession.

TMC95. But I have so *many* obsessions.

TFOG. But one above all. This lady is *Possibility*.

Blonde. Possibility unexplored, thank you.

TLB. I LOVE Possibility.

TMC95. Of course! You are my goddess!

GOO. My goddess too! The goddess who can be seen and appreciated, and yearned for, but somehow never touched--

TMC95. --Of whom, and about whom, I so many questions--

Blonde (drily). On whom you are always imposing your ideas. You guys are always poking at me!

TMC95. Ask and impose, ask and impose. Isn't that how it always is between men and women?

TFOG. It's a cycle of compromise.

Blonde. When did you ever compromise?

TFOG. You can't be poked physically, because you're not really there.

Blonde. Okay, technically untouched, yet probed invasively by every abstract means. What's a girl to do?

TMC95. Give yourself freely.

Blonde. Then I am no longer Possibility. You know that a woman possessed loses her fascination. Besides, it wouldn't be ME.

GOO. Possibility is like virginity or cotton candy: once taken, it ceases to exist.

Blonde. No, I'm subtler and a better flirt. When you act, you don't destroy Possibility, but you cause it to move in response. I respond subtly and intensely. I dodge, I shift, I fidget, I duck out from

under your arm. Your every motion makes me a newly-shifted, DIFFERENT possibility.

GOO. Such a flirt. You and I have always fooled around but never consummated.

Blonde. It cannot be otherwise. You're all hands, but I keep moving out of the way.

GOO. So you're all talk and too little action.

Blonde. Just as you're all scripts and too few shots in the camera.

GOO. That's because there are so many possible angles--

GOB. Like the geodesic dome, roundedness built from angularity --

TFOG. And I've never been able to settle for just a part of you--

Blonde. You can never have ANY part of me. Whatever you seize is no longer part of Possibility. It breaks off, like a salamander's tail.

GOB. Like every structangle, Possibility is a latticework of relations all of which must be taken together to understand the whole--

TLB. I do not fully understand this. But I find it suggestive.

TMC95. You understand more than you're letting on.

TFOG. As you always did.

GOO. But wait! Why does she look like YOU guys?

TFOG. Because everyone see the possibilities that are in themselves.

TMC95. Because the possibilites people see are only what's inside us.

under your arm. Your every motion makes me a newly-shifted, DIFFERENT possibility.

COCO. Such a flirt. You and I have always fooled around but never consummated.

Blonde. It cannot be otherwise. You're all blonds, but I keep moving out of the way.

COCO. So you're all talk and too little action.

Blonde. Just as you're all scripts and too few shots in the camera.

COCO. That's because there are so many possible angles--

COCO. Like the geodesic dome, roundedness built from angularity --

TFOC. And I've never been able to settle for just a part of you--

Blonde. You can never have ANY part of me. Whatever you seize is no longer part of Possibility. It breaks off, like a salamander's tail.

COCO. Like every structangle, Possibility is a latticework of relations all of which must be taken together to understand the whole--

TILB. I do not fully understand this. But I find it suggestive.

TMC9S. You understand more than you're letting on.

TFOC. As you always did.

COCO. But wait! Why does she look like YOU guys?

TFOC. Because everyone see the possibilities that are in themselves.

TMC9S. Because the possibilities people see are only what's inside us.

TLB. Because the possibilities we care about are the ones we feel part of, I think.

The Interview Begins.

Z31. We must get to business. Remember, this is an interview for a magazine. They expect results after all this setup.

TLB. An interview? I've already been interviewed by LOOK magazine.

Z31. Ahem. Gentlemen, to business. First question. *Who is Ted Nelson?*

TMC95. I am.

TFOG. I am.

TLB. Ted Nelson? So that will be my grown-up name?

TFOG. Ted Nelson is someone who tries to explain everything to everybody, in his own language.

TMC95. Ted Nelson is someone who defies the world, does things his way, tries new ways of doing anything, new ways of life.

What do you want?

Z31. *What do you want?*

TLB. I want to understand everything. I want to be an actor. I want to make movies. I want to change the world completely. I want to live a very different kind of life from the stodgy middle class.

TMC95. I want total vindication of all my work.

TFOG. I want more typists and proofreaders and people who can read my handwriting. So many notes, so little time.

Hey, but wait a minute. If you're the Us from the future, you know some of the answers. So we get to ask some questions too. WHAT HAPPENED TO THE WORLD!?!?

Z31. You don't need to know.

TLB. I HATE THAT ANSWER! That's what the teachers say.

TMC95. The technoid putdown, the bureaucrat's disguise.

Z31. But I'm the interviewer.

TFOG. These role divisions are absurd!

Z31. You are endeavoring to break the context.

TLB. As I always do.

TMC95. To step out of whatever context and see around the corner, to be the atom out of line looking down all the tunnels of the crystal; that is my strategy.

GOB. Which shows what energy is capturable by leveraging small-scale structural juxtapositions. And shows the structural integrity of energy crystallized.

Not Narrowing Down

Z31. What has been your biggest problem?

TLB. Loneliness.

TMC95. Carelessness.

TFOG. I talk too much.

GOB. Ah, but consider that "talking" and "too much" may be thought of as articulation and constraint; and articulation and constraint are the works and walls of engineering.

TFOG. Actually, my biggest problem was NEVER NARROWING DOWN. I would never let go of the big picture.

GOO. Refusing to Narrow Down! Right! It has to do with Overview and Appetite!

GOB. And large-scale unified design yields a stronger mesh of integrally mutually-supportive connectivity.

TFOG. But you, my heroes Orson and Bucky, were not ordinary and did not narrow down. That's why I have always turned to you for support.

GOO. Right! Find out how to show the world!

GOB. Right! Structural combinatorics giving strength and flexibility.

Z31. Ah. Oho. Now I see, Orson and Bucky, who you really are and why you're really here. You two are just a claque, an imaginary cheering section!

TMC95. Of course. These are not the real Orson and Bucky. These are the Orson and Bucky I needed.

TFOG. Without these guys, I couldn't have gone on. What I wanted was to make movies and be a major intellectual, but I got stuck doing a great duty for the world. So I've had a long lonely journey, like theirs.

MOVIES AND ACTING, POSSIBILITY AND SOFTWARE

TLB. So I don't get to make movies? Or be an actor?

GOO. There are many kinds of actor, young man, and to say someone does not act is to say he is totally passive.

Z31. I'm going to have to wrap this up; but be assured, young man, that you eventually will have accomplished something worth-- worth all this trouble to, uh, to me and my editors. We have piled up expensive illusions in your honor. A great magazine does not pile illusion on illusion for just anybody.

TLB. Thank you, I suppose.

GOO. Illusion on illusion-- the nature and joy of media.

TMC95. Illusion on illusion-- our world today.

TLB. My favorite story when I was little was "The Emperor's New Clothes"-- how people can be fooled by shared illusions, and how important it is to see through them with fresh vision.

TFOG. But seeing things right, seeing through illusion, is not easy.

GOO. And getting the *right* illusion can be the problem. Illusion can be cheap, like these underfunded effects. But good illusion, with artfulness and a point, is not so easily come by.

TMC95. That's software design in a nutshell.

TLB. That's life in a nutshell, isn't it?

TFOG. You out there! You who are reading this transcript, wherever, whenever! Listen and think!

GOO. Thought is an art.

GOB. And living out that thought is a further art.

TMC95. Both an art and a fight.

GOO. Art is ALWAYS a fight.

GOB. Thought and art are illusions, snatched from Possibility.

Blonde. But no matter what you snatch, I've always got something more that you want.

TMC95. Software and film and literature are illusions.

TFOG. Important illusions.

GOO. And the problem is getting the illusion RIGHT.

TLB. The other problem is SEEING THROUGH the illusion.

TFOG. And I had to do both: make illusions and see through them.

TMC95. Both of which demand vision, clearmindedness, audacity, defiance and determination and temerity. Perhaps I wasn't quite up to it.

TLB. So it couldn't have been be any other way?

TMC95. I see. I feel better.

TFOG. So do I.

TLB. I too feel better now. But I guess I won't later, having to live it through as you guys.

TFOG. Yes. But we're who you wanted to be.

Z31. I had intended to have the last word.

Three Teds. Now THAT was illusion.

You grew up in Greenwich Village.

Nelson:

And when I was ten years old I read Albert Parry's *History of Bohemianism in America*, and decided that when I grew up I wanted to be a Bohemian. Bohemians got to live any kind of life they wanted.

Omni:

What does that have to do with your work?

Nelson:

In that book I read about a guy named Joe Gould, a Village figure of the 1920s, who was creating what he called *The Oral History of the Universe*. He was writing down everything interesting that he heard. That seemed to me a noble calling.

Omni:

Indeed.

Nelson:

So several years into the Xanadu project, I realized that Xanadu was the electronic update of what Joe Gould had tried to do.

Omni:

You're a preservationist.

Nelson:

Indeed. Very much so.

Omni:

Is it all worth preserving?

Nelson:

Indeed. Very much so.

<u>AND HOW WILL WE PRESERVE FREEDOM?</u>

Omni:

And how will we preserve freedom?

Nelson:

It's a tough one--

Nelson:

Omni:

[These are mostly HOs from the Playlet.]

HO /d23 more ----------

describing and theorizing in his own ideas and words.
A guy with a very different attitude.
The Feisty Old Guy tries to quiz Z31.
(-- there shd be transition here)
Blonde. But no matter what you take, I

HO /d22 more ----------

throughout heaven and earth,
The room is indefinitely large;
Somehow neon flashes now and then.
Ted The Little Boy I like this.
Ted at Mid-Career 1995, Ted the Feisty Old Guy (together).
TMC95. You are DEFINITELY not-- like--
The Three Teds. Me.
Somehow the idea just changed.
And I am deeply part of your psyche, Ted Nelson.
technically untouched, yet always probed invasively.

TIME-WARP SECTION: HOLDS, GOOD

Who is Ted Nelson?

TFOG. Don't worry about it. What I need are
Back to Business
live a very different kind of life from what I see around me.
There are so many notes to go through.
Now THAT was an illusion.
sees and describes and theorizes in his own ideas and words, and

HO /d22 ----------

GLEANERY FOR TIME-WARP DIALOG

To DIALOG from INTERVIEW PARTS?

TMC95. I like this kind of interview, you're a good straight man, Bureaucrat Me. The answer is, by having it owned by no single source.

GOO. Can this be used for more than just text?
TMC95.
Of coure! All media can be distributed this way.
GOO. Movies?

[These are mostly HOs from the Playlet.]

HO \d23 more ----------

describing and theorizing in his own ideas and words.
A guy with a very different attitude.
The Feisty Old Guy rules in quix 23).
(-- there shd be transition here)
Blonde. But no matter what you take, I

HO \d22 more ----------

throughout heaven and earth
The room is indefinitely large;
Somehow neon flashes now and then.
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live a very different kind of life from what I see around me.
There are so many pieces to go through.
Now THAT was an illusion.
sees and describes and theorizes in his own ideas and words, and

HO \d22 ----------

CLEANERY FOR TIME-WARP DIALOG

To DIALOG from INTERVIEW PARTS?

TMC95. I like this kind of interview, you're a good straight man, Bureaucrat Me. The answer is, by having it owned by no single source.

GOO. Can this be used for more than just text?
TMC95.
Of course! All media can be distributed this way.
GOO. Movies?

TMC95. Right. It even means that independent movie producers can distribute their stuff through computer networks.
GOO. Now you're talking.

TLB. I've always hated school. Ostensibly the purpose of school is to teach, yet it has embittered me.
GOO. Ostensibly?
TLB (one-upping him). Indubitably.
GOO. My kind of kid.

Interview Basics

Z31. (Nervously, checking his clipboard.) We aren't getting anywhere, this needs to be more systematic. I think I had better concentrate on one of you. (To Ted Now.) You be the spokesman. Who are you, and what do you do?
TNow. My name is Theodor Holm Nelson. I have accomplished nothing.
TFOG. So far. heh heh.
Z31. Come now. You're well known for having made up certain words--

TMC95, mockingly. Here's how I have to keep introducing myself: "You've heard the terms hypertext and hypermedia? Well, I coined them, thirty years ago." But that's not my main work. My main work is Project Xanadu, the universal linked publishing system.

Z31. Yet so far incomplete, after thirty-five years.

TFOG. Hold on there, kiddo. It ain't over yet.

TFOG. Don't forget "dildonics."

TMC95. Oh Jesus, did that last till your time?

TFOG. My time is your time. Words last.

TLB. I've always hated school. Ostensibly the purpose of school is to teach, yet it has embittered me.

GOO. Ostensibly?

TLB (one-upping him). Indubitably.

GOO. My kind of kid.

BEST HOd21

SEX DISCUSSION

TFOG. I was always in love, and obsessesed with sex, from an early age.

TLB. THAT'S NOT TRUE!

TFOG. But I had to hide it.

TLB. Why did you have to tell that?

TMC95. It's okay, you're among selves here.

TLB. I thought you said this was for a magazine.

TMC95. A different kind of magazine.

TFOG. In a different kind of world.

HO /d21 ----------

with discreetly suggestive openings.

GLEANERY FOR INTERVIEW PARTS

Hold on there. It ain't over yet. (haughtily).
beaming down.
I'm meeting someone from each time of my life?
So is this like the plot of
TLB. So is this a dream?
Blonde. Everything, to your last breath.
Blonde. No, I'm subtler and more sensual/flirtatious than that.
Action does not destroy Possibility, but causes it to move in response. Each step taken makes me a newly-shifted, DIFFERENT possibility.

TIME-WARP SECTION: THE BEST PARTS

TFOG. Yeah, but that'll be handled.
Ted the Feisty Old Guy tries to quiz Z31.
Z31. What has been your biggest mistake?
G. Bucky. Structurally subdividing the problem yields a stronger mesh of integrally mutually-supportive connectivity.
Z31. To continue with you, Ted 9f '95. Where has this gotten you?
TMC95. Yeah, well, not where I wanted to be.
TLB. But I can never connect with ordinary sorts of people.
TNow. Not yet, not yet.
T.Kid. So I don't get to be an actor.
TLB. That's doubletalk to avoid answering. Making it sound good, like the ending of "Pinocchio." I hated "Pinocchio." At the end he ceased to be special, he didn't get to be an actor, and he had to go back to school. And they pretended that was a happy ending. It's time for *our* happy ending.
the vision

> **Z31**. You spoke of a Big Insight. Could you describe it?
> **TMC95**. In the fall of 1960 I took a computer course and figured it all out: hypermedia, the future of literature, the network delivery system we would need, how to preserve freedom in the electronic future. And since then it's been a long, unpleasant fight.
>
> **Z31**. Let's go through that slowly.
> **TMC95**. Okay. First of all, the computer screen makes sequential writing obsolete. Our new, generalized writing, which can branch in any direction, is *hypertext*. Add sound and graphics and you get *hypermedia*.
> **Z31**. Of course.
> **TMC95**. So how will we dish that up? Obviously, through a network of server machines distributed around the planet.
> **Z31**. Of course.
> **TMC95**. That is the future of literature. But the big questions are, how do we prevent Big Brother from getting hold of it, ahd how do we allow every minority view to be heard?
> **Z31**. How do we?
> **TMC95**. I like this kind of interview, you're a good straight man, Bureaucrat Me. The answer is, by having it owned by no single source.
> **Z31**. So how is this different from the Internet?

TMC95. Two main ways. The Internet is just a giant transport system, but it has no provisions for royalty, no clear way to deal with authorship and ownership. The great Xanadu proposal is for open hypermedia publishing, with a threefold solution to copyright, royalty and quotation.
Z31. Threefold?
TMC95. One, anybody can link to your materials, publish comments on them, musical accompaniment, etc. That's what we mean by open hypermedia publishing. Two, automatic tiny royalty to the publisher on every byte that a customer sends for. And three, anybody is free to quote you at any length without breaking the royalty scheme-- by *pointing* at the part to be quoted, but not copying it. The user's screen machine, getting to that material in the new document, automatically buys it from the original source.

GOO. Can this be used for more than just text?
TMC95. Of coure! All media can be distributed this way.
GOO. Movies?
TMC95. Right. It even means that independent movie producers can distribute their stuff through computer networks.
GOO. Now you're talking.

HO d20 to KEEP HANDY
Dramatis Personae: The Interviewees
Ted the Little Boy (TLB)
Ted at Mid-Career, 1995 (TMC95)
Ted the Feisty Old Guy (TFOG)
Dramatis Personae: The Interviewers
Ghost of Orson.
Ghost of Bucky.
Z31, a clone from the future.
A Mysterious Blonde Woman.

MAIN HO /d20 ----------

Still unassimilated.

bucky quotes
GOB. Mutually supportive relationships
GOB. Roundedness coming from angularity

G. Bucky. Roundedness from angularity
G. Bucky. Structural combinatorics ...

G. Bucky. Articulation and constraint

G. Bucky. Unified summation of the structural components

G. Bucky. Combine strength and flexibility

Z31. *WHAT ARE YOU TRYING TO DO?*
I want to make the world *right.*
I want it to be less stodgy, less stuffy.

designing paradigms
I DESIGN PARADIGMS. Building on special insight.

I held on

TMC95. I held on.
TFOG. I held on.
GOO. You held on.
G. Bucky. You held on.
T.Kid. To what?

TFOG. I never was well organized.

key story items?
7th grade dropout

Movie, Rock Musical

1960 vision & stereo

msc joke
Z31. So do you consider yourself a computer scientist, or what?
TNow. I consider myself What.
TFOG. Definitely.
hmm

Z31. What do you do?
TMC95. Whatever needs doing.

the future

Z31. *HOW DO YOU SEE THE FUTURE?*
T.Little Boy. CHROMIUM AND LIGHTNING. SPACE TRAVEL.
TMC95. A hideous world of new dangers from every corner and probable annihilation.
TFOG. Coming around.

grammar

Z31. These things can't be helped. These are the small frustrations that must be put up with.
T. Little Boy. Like your ending a sentence with a preposition.
GOO. Hey, kid, lighten up on this grammar stuff. Look at what is happening around us--
GOB. Simulacra of vastly wasted resources invite your attention.
Z31. I have made considerable arrangements for us to be here.

Was my work vindicated?

TN. I seek complete vindication. (To TFOG.) Was my work vindicated?
TFOG. I won't say.
Z31. It will all work out, but not the way you think.

haven't achieved

Z31. You have cleverly avoided achieving anything concrete.
TN. Fuck you too.
Z31. You could've stuck with just one thing.
TN. That's not me. I have one contribution in each area.

paranoia

Paranoids are always the first to know.
A lot of guys have thought they were Napoleon.
But one was right.

the future

TORMENTED AND HORRIBLE VISIONS OF THE WORLD'S FUTURE.
Forrester,
Club of Rome,

von Foerster,
Stephen Jay Gould,
Vonnegut

tn obsessions
DUTY
MARTYRDOM
INDIGNATION

tn crippling moods
FEAR
DEPRESSION
GRIEF
LONELINESS
PARALYSIS

Intuitive vs analytic
ANALYSIS vs INTUITION

tn heroes
Hamlet,
Higgins,
Cyrano,
Quixote,
Pan.

Bucky,
Bertie,
Orson,
Walt.
HUME, BLOOMFIELD, KORZYBSKI, ZELLIG
HARRIS
BUCKY FROM '49
BERTIE FROM '49
Korzybski & Hayakawa

tn's subjects
SKX
STGL
FUCKUP OF MATH TEACHING
FLUM
PROUST, WOLFE
THEMATICS

SKX
FLUM
DES
VIRT
VIRTLG
STRAT
BST
STEREO
CKM
TRKF
ACTSIM

MEDIA AS INSIDER
MADE CONFIDENT OF INSIGHTS
'He is thinking'

interview areas
Why didn't you finish
Search for way of life
Horrors of school
Horrors of middle-class life
Sex
The Future
The Government
SelfPub
Minority views & subcultures
Shallow, Conv, Pomp, Smug
Educ. Estab.

Sexuality can be gotten away with in certain very specific contexts. Rock music, garment industry, theater, sports...

T. Feisty Old Guy. This will give me the strength to go on.
T. Feisty Old Guy. Me too.
T. Little Boy. I too.
LBT. I now *shall* have the strength.

MTV somehow Got Legit
The Clitorati singing "Read My Lips"

Words I coined
'digital sex' was what we called "third base."

personality traits
Z31 keeps saying 'we'
T. Little Boy keeps correcting others,
T. Little Boy says "ostensibly"

The Setting.
Ted Now.
The Interviewers:
The Interviewees:
It better be good.
welcome, preliminaries
satire, an exception.
Likewise if steel.
creating this building
the time-twisting involved
can have great payoff.
who we seem to be
You just corrected my grammar;
T. Now. Let's be honest about who's who.
And I'm going to be they, the two of you?
I suppose I should remember it twice
GOO. Figments, I would say.
and what's going on.
Who is this guy?
I am your clone,
The blonde
the two of you?
What's an extra chromosome
TNow. I'm beginning to suspect who you are. You're a tease.
Something that always infuriated me.
you're Possibility
But not physically.
What you take no longer exists; bonbons in the box turn to guilt on the tongue.
once you take a step, it's gone.
But no part of me can be captured;
Like anything physical,
TMC95. That's part of why I had The Big Insight.

TFOG. That is how I have approached everything. .
instead, for so long, did what I felt was
TMC95. That's right! Mutually-supportive connectivity.
These are the Orson and Bucky I need personally.
narrowing down
back to business
so I don't get to make movies?
worth all this trouble to, uh, to me and my bosses.
The others. Then *interview somebody else.*
TMC95. Oh Jesus, did that last till your time?
TFOG. My time is your time. Words last.
Interview Basics

MOVE TO INTERVIEW SECTION

HO /d17 ----------

But that's how it is with you;
G.Orson. So there I am, always ogling all of possiblity, all her angles, never settling for just a part of her--
more than just thinking.

HO /d16 ----------

TFOG. To do a job unquestioningly is not like us.
Once seized, I become another deed, or another attempt.
Z31. What was this Big Insight?
T.Now. A clever guy with a very different attitude.
the straight interview part

•••

G.Orson. Now you're talking. [Shakespearean quote?]I hate some of my teachers and classmates.
That is the point of all my work.
TFOG. But it's true.
TNow. I turn to you guys for support, as I have so often.

HO /d15 ----------

XXX
XXX
While always obsessing about you.
Ted Nelson is someone very stubborn.
but show parts teasingly.
TNow. You're a hot lady with an attitude.
T. Little Boy. Think about you always?
T.Now. It's a peculiar situation. In the fall of 1960

Not So Done. ----------

The irony is that people would have figured it all out anyway, I needn't have wasted my time.
T.Now. That's right! Mutually-supportive connectivity. But I could never connect with ordinary sorts of people.
T.Kid. Sometimes they're just DUMB.
TFOG. You! You who're out there, reading the transcript! Do you get that there *is* a point?

HO /d14 ----------

LET'S START WITH BASICS: WHAT NEEDS TO BE SAID IF THIS WERE JUST A STRAIGHT INTERVIEW?
you're not one of the girls I've been in love with.
re *unexplored possibility*, my lifelong obsession.
T.Now. Of/About whom I always ask questions.
T.Feisty Old Guy. That was big, that was big. I still remember it.
Z31. What do you consider to be your main work?
Z31. What would you have done differently?

HO /d13 ----------

where things fit both the way they are and should be.
If this is an imputation about my sexuality--

HO /d12 ----------

T. Now. Let me break the context some more.
T.Now. It's a cycle of compromise: ask and suppose, ask and suppose.
Disney movies

HO /d11 ----------

It seems some sort of accusation of latent tendencies.
Who is the Mysterious Woman?
Is this a statement about my sexuality?

HO /d10 ----------

FIGURE OUT BEST THINGS TO SAY, THEN THE CLEVEREST QUESTIONS FOR THEM.
Who is this Z31?
Not necessarily.

HO /d9 ----------

This is an interview.

HO /d7 ----------

POSSIBILITY BECOMES DEED
Thank you for that, but you're ungrammatical.
Don't look now, but I think I hear the keystroke.
[who is MW?]
and describes, theorizes.
Illumination is from pin-spots in the ceiling, beaming down.
but anything anyone wants appears in front of him or her.
Neon displays in the ceiling flash from time to time.

The size of the room is indefinite, though it seems to have faraway walls gleaming darkly.
to all concerned,
On one side of the room, p
of some gleaming charcoal material.
The Players.
desklets and projection-screens appear in front of the participant as needed.
once for each of you Is.
, if Einstein is right,
T. Now. So it's like the big scene in David Gerrold's *The Man Who Folded Himself*, where this lonely Time King gets to be together with himself at every age.
TN. I bet the editor puts an apostrophe in the plural of "I."

HO /d6 ----------

GOO (Ghost of Orson)
GOB (Ghost of Bucky)
Thad Norberg
TN (TedNow)
LBT (Little Boy Ted)
TLB (Ted the Little Boy)
TFOG (Ted the Feisty Old Guy)

HO /d5 ----------

Interviewer:

TK	**Ted the Kid.**
OBT	**Old Bitter Ted**
TOG	**Ted the Old Guy.**
OGT	**Old Guy Ted.**
TN	**Ted Nelson**
Orson	
YBT	**Young Bitter Ted.**

Interviewee:

Ted	
(Trickster name)	
Z31	**Tclone from the future.**

Interviewer:
We 3R1.
The setting is a room of chromium, teak and brass.

Dimly lit. Glass panels, for writing. Whatever.
So it's like *A Christmas Carol*, right?
I certainly would remember this from when I was your age, and
(at screen, 93.11.9)
From stickies, input 93.11.10.

HO /d ----------

ENDLINE _____ **STAY OFF HERE**

HO d8 ----------

and were his principal obsession in childhood apart from sex. His grandparents were well-to-do and he never had much sense of the lives of ordinary people.

LEADS?

Dubious leads--

Ted Nelson has been all over.

A real-life Zelig, he has flowed through various elites

As a boy he wanted to be an actor, writer, movie director.

In college he thought of being an architect, sociologist, structural linguist (he doesn't know any other languages but English, but pronounces them excellently, a totally useless ability).
His Norwegian uncle Agnar Mykle, who died recently and is being recognized as one of the great Norwegian writers of the century, predicted when Ted was 14 that he would be a "philosopher-scientist," even though he was impressed with Ted's knowledge of films.

As a little boy he listened to radio. At eleven he was first on TV

Sapporo is a bustling metropolis

on the cold northern Japanese island of Hokkaido. At winter there are ski festivals and ice carving

HO d7 ----------

(Turning into a mix of interview and PreDescrip.)

he is thought by many people to be much younger.
No academic appointments

HO d5 ----------

He has been through the mill

Ted Nelson is as American as you can get, though he is anything but typical.
MOVE THIS TO MAIN?

HO d8 ----------

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MOVE THIS TO MAIN?

HO d4 ----------

His bitter rival, Nicholas Negroponte of the Media Lab half his age.

HO d3 ----------

From hip, am 315.

ENDLINE_____ STAY OFF HERE

HO d4 _____

His bitter rival, Nicholas Negroponte of the Media Lab
half his age.

HO d3 _____

From hip, am 315.

ENDLINE _____ STAY OUT HERE

Omni:
Who are you, and what do you do?

Nelson:
My name is Theodor Holm Nelson. I have accomplished nothing.

Omni:
Come now. You're well known for having made up certain words --

Nelson, mockingly: Here's how I have to keep introducing myself: "You've heard the terms hypertext and hypermedia? Well, I coined them, thirty years ago." But that's not my main work. My main work is Project Xanadu, the universal linked publishing system.

Omni:
Yet so far incomplete, after thirty-five years.

Nelson:
(Coldly.) So far. But I have other main work. I consider myself a generalist, and it may be that my new theory of

psychology may be judged my most important work, or perhaps my work in philosophy.

Omni:
Don't forget "dildonics."

But the big questions are, how do we prevent Big Brother from getting hold of it, ahd how do we allow every minority view to be heard?

Omni:

How do we?

Nelson:
The answer is, by having it owned by no single source.

Omni:
So how is this different from the Internet?

Nelson:
Two main ways. The Internet is just a giant transport system, but it has no clear way to deal with authorship and ownership of documents, no provisions for royalty.

The great Xanadu proposal is for open hypermedia publishing, with a threefold solution to copyright, royalty and quotation.

Omni:
Threefold?

Nelson:
One, anybody can link to your materials, publish comments on them, musical accompaniment, etc. That's what we mean by open hypermedia publishing. Two, there's an automatic tiny royalty to the publisher on every byte that a customer sends for. And three, anybody is free to quote you at any length without breaking the royalty scheme-- by *pointing* at the part to be quoted, but not copying it. The user's screen machine, getting to that material in the new document, automatically buys it from the original source.

MANY MEDIA

Omni:
Can this be used for more than just text?

Nelson:
Of course! All media can be distributed this way.

Omni:
Movies?

Nelson:
Right. It even means that independent movie producers can distribute their stuff through computer networks.

As a boy

4 he believed in Progress, extreme progress to a totally different world. Considering himself bullied, he disliked other kids and sat in trees a great deal. Six years before Sputnik he wanted to live by himself in his own earth satellite, showing his tendency to be ahead of his time.

1 As a boy he dreamed of Greatness, then realized that issues were more important.

3 Great philosophical questions bothered him from a very early age; throughout childhood he thought mostly about philosophy, movies, Oz and sex.

Q. Your immodesty may have been a problem in your life.

I see myself as honest and straightforward. My life and situation are unique and interesting by almost any standards.

My 1960 vision was in some ways a major event of the century. I think that's an objective fact.

You wanted to be all kinds of things--

The only thing I never wanted to be was a baseball player.

I started hating sports when I was about ten. The boys who pushed me around were into sports, and I had no desire to enter their world. Also, I pointed out that sports teams were simply money-making corporations that preyed on civic pride, spuriously associating themselves with towns in order to make money by deluding the locals, pretending they somehow represented them. The other kids didn't want to hear that.

Ted Nelson is often described, to his annoyance, as "charming and sweet." He considers himself angry and embittered, and thinks "charming and sweet" sound wimpy.

He is always ready to tell a story, explain something peculiar, and tell you some marvelous bit of trivia.

Jack of all trades, "nexialist" (from *The Voyage of the Space Beagle,* by A.E. van Vogt?)

I had two obsessions in childhood: philosophy and sex.

Clever, mischievous, considered by others crazed and unpredictable, considered by himself to be rock-steady, clear-minded and determined, an atheist on a mission from God.

Social scientist and philosopher manqué

He's made it into the national high-school curriculum of Scotland.

And nobody understands the important stuff yet.

Omni:

would mean that he hasn't made it; he will just say he hasn't made it YET.

"I haven't done ANYTHING," he says. "My career still lies before me."

A recent review of a speech you gave said you are regarded with "a mixture of awe and contempt" by others in the hypertext field. How do you feel about that?

Pretty bad, but it's true. And it's mutual.

Your father--

His father, who was deeply anti-intellectual, disliked him and didn't have the faintest idea what he was about.

My father thought I was going to graduate school in SOCIAL WORK-- which I considered a useless endeavor carried out by those who "like to work with people." I was a cynical theoretician, my interest in sociology was an extended polysyllabic sneer at humankind, and I HATED to work with people. I've just begun to learn.

How do you see yourself, then?

As rightful creative royalty in exile, like Nikola Tesla, Louise Brooks, Bobby Fischer. They'll see, they'll see.

Today's nightmare computer world

Nightmare parody

His disdain for Apple and Bill Gates-- "Tweedledum and Tweedledee"-- goes deeper, to a bitter rivalry with all of Xerox PARC and the Media Lab

> "They speak for professional pomposities. They say they know it all. But someone else thought of this stuff back then, and he's not going away."

First-person stuff

We knew we should publish an interview with Ted Nelson, but who could do it? Finally *Omni* asked Ted Nelson to interview himself. Sure enough, the result was typical Nelson, meaning not what anyone expected. It took more resources than we imagined, throughout heaven and earth, but we think you will enjoy the result.

would take about six months. That was thirty-five years ago.

Omni:

What took so long?

Nelson:

What I had set out to do was *hard*.